

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/618,998	09/07/2004	Mohammad Jamal El-Hibri	250465US	5959
75	90 03/13/2006		EXAM	INER
McDERMOTT, WILL & EMERY			DANG, PHUC T	
600 13th Street, N.W. Washington, DC 20005-3096			ART UNIT	PAPER NUMBER
			<u></u>	TATER NOWBER
			2818  DATE MAILED: 03/13/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

0	
U	

	Application No.	Applicant(s)				
	10/618,998	EL-HIBRI				
Office Action Summary	Examiner	Art Unit				
·	PHUC T. DANG	2818				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
<ol> <li>Responsive to communication(s) filed on <u>Pre-A</u></li> <li>This action is <b>FINAL</b>.</li> <li>Since this application is in condition for alloware closed in accordance with the practice under <u>E</u></li> </ol>	action is non-final. nce except for formal matters, pro					
Disposition of Claims	•					
<ul> <li>4)  Claim(s) 1-47 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-29 and 40-47 is/are rejected.</li> <li>7)  Claim(s) 30-39 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application Papers						
9)☐ The specification is objected to by the Examine 10)☑ The drawing(s) filed on <u>07 September 2004</u> is/s Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Ex	are: a)⊠ accepted or b)⊡ objec drawing(s) be held in abeyance. See ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  2) ☑ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 071503 & 040804 & 0 2 0 3 0 5	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:					

Application/Control Number: 10/618,998 Page 2

Art Unit: 2818

#### **DETAILED ACTION**

1. This application is a CON of PCT/US03/11501 filed on April 15, 2003 which claims benefit of 60/372,078 filed April 15, 2002 and claims benefit of 60/452,961 filed March 10, 2003.

### **Preliminary Amendment**

Preliminary Amendment filed on July 15, 2003 has been acknowledged and considered.
 Claims 1-47 are currently pending in the application.

#### Oath/Declaration

3. The oath/declaration filed on September 7, 2004 is acceptable.

#### **Information Disclosure Statement**

4. The office acknowledges receipt of the following items from the applicant:

Information Disclosure Statement (IDS) filed on July 15, 2003, April 18, 2004 and February 3, 2005 fails to comply with 37 CFR 1.98(a) (2), which requires a legible copy of each foreign patent and NPL document; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application filed, but the information referred to therein has not been considered.

## **Drawings**

5. The drawings filed on September 7, 2004 are acceptable.

# Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-47 are rejected under 35 U.S.C. 102 (b) as being anticipated by Hage et al., hereinafter "Hage" (U.S. Patent No. 6,420,514 B1).

Regarding claim 1, Hage discloses a method of providing a polysulfone polymer with low yellow coloration comprising reacting 2,2-bis(4-hydroxypheny) propane with at least one diarylsulfone compound to form a low-color content polysulfone polymer, wherein the 2,2-bis(4-hydroxyphenyl)propane comprises less than 0.27% by total weight of 2-(4-hydroxyphenyl)-2-(2-hydroxyphenyl) propane and 2,2-bis-(2-hydroxypheny)propane [col. 8, lines 34-41].

Regarding claim 2, Hage discloses the at least one diarylsulfone compound comprises two aryl goups bridged by a sulfone goup [col. 8, lines 42-44].

Regarding claim 3, Hage discloses each aryl group is substituted with one reactive group selected from the group consisting of halogen, cyano, and hydroxyl, with multiple substituents, if any, being either the same or different on each molecule [col. 8, lines 45-49].

Page 4

Art Unit: 2818

Regarding claim 4, Hage discloses the at least one diarylsulfone is selected from the group consisting of bis(4-chlorophenyl)sulfone or 4-chlorophenyl-4'- hydroxyphenylsulfone [col. 8, lines 50-53].

Regarding claim 5, Hage discloses the low-color content polysulfone polmer is injection molded at a temperature of at least 100 °C. to produce a transparent polymeric material with a color index of less than 1.00 [col. 8, 54-57].

Regarding claim 6, Hage discloses the low-color content polysulfone polymer is injection molded at a temperature of at lemst 100 °C. to produce a transparent polymeric material with a color index of less than 1.00 [col. 8, lines 58-61].

Regarding claim 7, Hage discloses the low-color content polysulfone polymer is injection molded at a temperature of at least 100 °C. to produce a transparent polymeric material with a color index of less than 1.00 [col. 8, lines 62-65].

Regarding claim 8, Hage discloses the low-color content polysulfone polymer is injection molded at a temperature of at least 100 OC. to produce a transparent polymeric material with a color index of less than 1.00 [col. 8, line 66-col. 9, line 2].

Regarding claim 9, Hage discloses the low-color content polysulfone polymer is injection molded at a temperature of at least 100 °C. to produce a transparent polymeric material with a color index of less than 0.75 [col. 9, lines 3-6].

Regarding claim 10, Hage discloses the low-color content polysulfone polymer is injection molded at a temperature of at least 100 °C. to produce a transparent polymeric material with a color index of less than 0.75 [col. 9, lines 7-10].

Regarding claim 11, Hage discloses a 2,2-bis(4-hydroxmhenyl)propane composition is recrystallized to form 2,2-bis(4-hydroxyphenyl)propane that comprises less than 0,27% by total weight of 2-(4-hyfoxyphenyl)-2(2-hydroxyhenyl)propane and 2,2- bist(4hydroxyphenyl)propane [col. 9, lines 11-16].

Regarding claim 12. Hage discloses the 2,2-bis(4-hdroxyhenyl)propane comprises less 0.25% by total weight of 2-(4-hydroxyphenyl)2-(2- hydroxyphenyl)propane and 2,2-bis(2hyloxrhenyllpropre)propane [col. 9, lines 17-20].

Regarding claim 13, Hage discloses the 2,2-bis(4-hydroxyphenyl)propane comprises less than 0.25% by total weight of 2-(4-hydroxyphenyl)-2-(4- hydroxyphenyl)propane and 2,2-bis(2hyloxrhenyl)propane [col. 9, lines 21-23].

Regarding claim 14, Hage discloses the 2-2-bis(4-hydroxrhenyl)propane comprises less than 0.20% by total weight of 2-(4-hydroxyphenyl)-2-(2- hydroxyphenyl)propane and 2,2-bis(2hyfoxrhenyl)propane [col. 9, lines 24-28].

Regarding claim 15, Hage discloses the 2,2-bis(4-hyœoxrhenyl)propane comprises less than 0.25% by total weight of 2-(4-hydroxyphenyl)-2-(2-hydroxyphenyl)propane and 2,2-bis(2hyloxrhenyl)propane and the color index of the polysulfone resin is less than 0.75 [col. 9, lines 29-33].

Regarding claim 16, Hage discloses the 2,2-bis(4-hydroxrhenyl)propane comprises less than 0.25% by total weight of 2-(4-hydroxyphenyl)-2-(2- hydroxyphenyl)propane and 2,2-bis(2hyfoxrhenyl)propane and the color index of the polysulfone resin is less than 0.75 [col. 9, lines 34-38].

Regarding claim 17, Hage discloses the 2,2-bis(4-hydroxrhenyl)propane comprises less than 0.20% by total weight of 2-(4-hydroxyphenyl)-2-(2- hydroxyphenyl)propane and 2,2-bis(2-hydroxrhenyl)propane and the color index of the polysulfone resin is less than 0.75 [col. 9, lines 39-43].

Page 6

Regarding claim 18, Hage discloses the 2,2-bis(4-hydroxrhenyl)propane comprises less than 0.15% by total weight of 2-(4-hydroxyphenyl)-2-(2- hydroxyphenyl)propane and 2,2-bis(2-hyfoxrhenyl)propane and the color index of the polysulfone resin is less than 0.50.

Regarding claim 19, Hage discloses a transparent, low yellow-coloration polysulfone layer comprising a polysulfone polymer derived from reactants comprising a 2,2-bis(4-hydroxrhenyl)propane and at least one diarylsulfone compound, wherein the 2,2-bis(4-hydroxrhenyl)propane comprises less than 0.27% by total weight of 2-(4-hydroxyphenyl)-2-(2-hydroxyphenyl)propane and 2,2-bis(2-hyfoxrhenyl)propane [col. 10, lines 3-9].

Regarding claim 20, Hage discloses a transparent, low yellow-coloration polysulfone ophthalmic lens comprising a polysulfone polymer derived from reactants comprising a 2,2-bis(4-hydroxrhenyl)propane and at least one diarylsulfone compound, wherein moieties in the polysulfone derived from the 2,2-bis(4-hydroxrhenyl)propane comprises units wherein fewer than 0.27% by total weight of 2-2bis(4-hydroxyphenyl)propane comprises 2-(4- hydroxyphenyl)-2-(2-hydroxyphenyl)propane and 2,2-bis(2-hyfoxrhenyl)propane [col. 10, lines 10-19].

Regarding claim 21, Hage discloses the layer has a color index of less than 1.00 [col. 10, lines 20-21].

Regarding claim 22, Hage discloses the polysulfone polymer has a color index of less than 1.00 [col. 10, lines 22-23].

Regarding claim 23, Hage discloses the polysulfone polymer has a color index of less than 0.75 [col. 10, lines 24-25].

Regarding claim 24, Hage discloses the polysulfone polymer his a color index of less than 0.50 [col. 10, lines 26-27].

Regarding claim 25, Hage discloses a transparent, low yellow-coloration polysulfone, injection-molded ophthalmic lens comprising a polysulfone polymer derived from reactants comprising a 2,2-bis(4-hydroxrhenyl)propane and at least one diarylsulfone compound, wherein moieties in the polysulfone derived from the 2,2-bis(4-hydroxrhenyl)propane comprises units wherein fewer than 0.27% by total weight of 2,2-bis(4-hydroxrhenyl)propane comprises 2-(4-hydroxyphenyl)-2-(2-hydroxyphenyl)propane and 2,2-bis(2-hyfoxrhenyl)propane [col. 10, lines 28-37].

Regarding claim 26, Hage discloses the layer has a color index of less than 1.00 [col. 10, lines 38-39].

Regarding claim 27, Hage discloses the polysulfone polymer his a color index of less than 1.00 [col. 10, lines 40-41].

Regarding claim 28, Hage discloses the polysulfone polymer has a color index of less than 0.50 [col. 10, lines 42-43].

Regarding claim 29, Hage discloses the polysulfone polymer has a color index of less than 0.50 [col. 10, lines 44-45].

Page 8

Regarding claims 40-46, Hage discloses the range of the yellowness index of the transparent, low yellow-coloration polysulfone layer [col. 3, lines 18-20].

#### Allowable Subject Matter

7. The following is a statement of reason for the indication of allowable subject matter:

Claim 30-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

None of the Prior art of record does not disclose the low-color content polysulfone polymer is injection molded at a temperature at least 100 °C to produce a transparent polymeric material with a yellowness index of less than 0.75 as cited in claims 30-36 and the 2,2-bis(4-hydroxrhenyl)propane comprises less than 0.15% by total weight of 2-(4-hydroxyphenyl)-2-(2-hydroxyphenyl)propane and 2,2-bis(2-hyfoxrhenyl)propane and the yellowness index of the polysulfone resin is less than 0.50 as cited in claims 36-39.

#### Conclusion

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kurosawa et al. (U.S. Patent No. 4,873,295) is cited interest.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuc T. Dang whose telephone number is 571-272-1776. The examiner can normally be reached on 8:00 am-5:00 pm.
- 10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on (571) 272-1787. The fax phone numbers for the organization

where this application or proceeding is assigned are 703-872-9306 for regular communications and Final communications.

11. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Phuc T. Dang Langehow

Primary Examiner

Art Unit 2818